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A SYNOPSIS OF THE NORTH AMERICAN SPECIES OF THE GENUS *PEGOMYIA* ROBINEAU-DESVOIDY (DIPTERA, ANTHOMYIIDÆ).

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The species included in the key all conform to my recent diagnosis of this genus. All have but two posterodorsal bristles on the hind tibia except *triseta* and *bicolor* which have frequently three, and the most of the species have also only two anterodorsal hind tibial bristles. In the great majority of cases the legs are partly or entirely reddish or yellowish, and in many cases the abdomen is also partly pale. No species known to me has a blunt bristle at apex of fore tibia on the posterior side, and no species has the hind tibia in male with short erect hairs on ventral surfaces.

Key to Species

MALES

1. All femora entirely pale or only the fore pair partly infuscated 2
- All femora partly or entirely infuscated 28
2. Prealar bristle less than half as long as the one behind it 3
- Prealar bristle over half as long as the one behind it.. 20
3. Length of third antennal segment greatly exceeding height of cheek; distance between vibrissae twice or more than twice as great as distance from either to nearest point of eye-margin; abdomen depressed; all femora pale; lower calyptra usually distinctly protruded 4

- Length of third antennal segment not as great or very slightly greater than height of cheek; abdomen cylindrical; lower calyptra not distinctly protruded.... 12
- 4. Fifth abdominal sternite blackened, furnished with a fringe of long erect fine black hairs along the inner margins of the processes; third antennal segment not over twice as long as second; thorax and abdomen yellowish testaceous, the latter with narrow dark posterior margins to the tergites and with a faint dark dorso-central vitta; third sternite about 1.5 as long as wide *luteola* Malloch
- Fifth abdominal sternite not as above 5
- 5. Species entirely pale testaceous yellow, including antennæ; lower calyptra distinctly protruded; hind tibia with three anterodorsal bristles; longest hairs on arista a little longer than its basal diameter... *unicolor* Stein
- Species not entirely pale yellowish testaceous, at least the third antennal segment darkened 6
- 6. Hind femora and tibiæ with exceptionally long bristles, the distal one on posterodorsal surface of tibia half as long as tibia *rufipes* Fallén
- Hind femora and tibiæ with normal bristling, the distal one on tibiæ not nearly half as long as the tibia.... 7
- 7. Hind tibia with two anterodorsal bristles; mesonotum entirely yellowish testaceous, or with a gray central vitta 11
- Hind tibia with three anterodorsal bristles; mesonotum largely or entirely fuscous 8
- 8. Scutellum black; processes of fifth sternite glossy brownish black, without hairs or bristles on outer surfaces, each process with a clawlike spur on inner side near apex, the base of which is on inner margin of process; basal segment of hypopygium with long bristly hairs *unguiculata* Malloch
- Scutellum largely yellowish; fifth sternite not as above. 9
- 9. Palpi infuscated apically; anterior lateral angles of thorax and scutellum yellowish testaceous; arista with its longest hairs a little longer than its basal diameter; lower calyptra distinctly protruded; scutellum almost bare on disc; posthumeral bristle not duplicated, the area between posthumeral and margin of thorax almost bare *winthemi* Meigen
- Palpi entirely pale; posthumeral bristle duplicated... 10
- 10. Anterior lateral angles of thorax and scutellum testaceous; tibial bristles strong, the posterodorsal surface of

- hind tibia often with three bristles; arista almost bare except on apical half; antennae largely or entirely rufous yellow *triseta* Malloch
- Anterior lateral angles of thorax black, scutellum testaceous at apex; tibial bristles comparatively short and weak; hind tibia with two posterodorsal bristles; arista with the hairs on basal half at least as long as its basal diameter; third antennal segment largely or entirely infuscated *fuscofasciata* Malloch
11. Abdominal tergites each with a distinct narrow fuscous fascia on posterior margin; hypopygium large.
vittiger Zetterstedt
- Abdominal tergites without fuscous fasciae; hypopygium small *geniculata* Bouché
12. Posthumeral bristle duplicated, numerous hairs usually laterad of posthumeral; hind tibia with three or more anterodorsal bristles; third wing-vein always bare at base 13
- Posthumeral bristle not duplicated, the area laterad of it bare or with a few setulose hairs near bristle; hind tibia with two anterodorsal bristles; third wing-vein usually with a few weak hairs at base 16
13. Palpi blackened at apices; abdomen blackish gray, with a black dorso-central vitta; fifth sternite with the processes tapered to apices, the inner margin of each concave near middle *hyoscyami* Panzer
- Palpi entirely pale; abdomen reddish testaceous, with a darker dorso-central vitta; fifth sternite with glossy processes which are not tapered to apices, but usually slightly dilated or knobbed at tips 14
- Palpi entirely pale; processes of fifth sternite not glossy, tapered to apices, which are slightly pointed 15
14. Hind tibia with three posterodorsal bristles; scutellum entirely, fore femora largely black; processes of fifth sternite blackened apically *bicolor* Wiedemann
- Hind tibia with two posterodorsal bristles; scutellum partly and fore femora largely or entirely reddish testaceous; processes of fifth sternite blackened apically.
calyptrata Zetterstedt
- Hind tibia with two posterodorsal bristles; thorax entirely brownish black; all femora testaceous, darker in middle; processes of fifth sternite not blackened apically. *minuta* Malloch
15. Third antennal segment with a transverse pale area at base on inner side which is slightly elevated and pre-

- sents the appearance of an overlapping scale; fifth sternite with rather conspicuous black hairs in a series near inner margin on basal half of each process which give the sternite the appearance of having a black fringe on each side of incision *ruficeps* Stein
- Third antennal segment with but slight indications of the pale scale like mark on inner side at base; fifth sternite with a few inconspicuous dark hairs. *rufescens* Stein
16. Mid femur with a very strong bristle on anteroventral surface at or beyond middle; costal setulae much longer than diameter of costal vein 17
- Mid femur without such bristles; costal setulae very weak 18
17. Cheek much higher than length of third antennal segment; hind femur with a regular series of 6 or 7 widely spaced anteroventral bristles.
- *spinosissima* Stein
- Cheek barely higher than length of third antennal segment; hind femur with 2 or 3 bristles on basal half and 2 or 3 on apical half of anteroventral surface, with a rather wide space between the series.
- *spinigerellus* Malloch
18. Arista with dense pubescence, its longest hairs at least as long as its basal diameter; third antennal segment largely yellowish *gopheri* Johnson
- Arista with barely distinguishable pubescence 19
19. Third antennal segment largely yellowish; mid tibia with a median anteroventral bristle *finitima* Stein
- Third antennal segment generally deep black; mid tibia without a median anteroventral bristle. *affinis* Stein
20. Thorax reddish testaceous, with a fuscous dorsocentral vitta; hind tibia with a posterior bristle one third from base *labradorensis* Malloch
- Thorax black; hind tibia without a posterior bristle. . . 21
21. Thorax when seen from above and behind with a broad, deep black shining vitta on each side; palpi entirely black 22
- Thorax sometimes more or less distinctly vittate but not as above 24
22. Longest hairs on arista as long as width of third antennal segment; fifth sternite with dense brushlike fringe of stiff, short, black setulae on basal half of inner margin of each process *juvenilis* Stein
- Longest hairs on arista not nearly as long as width of third antennal segment; fifth sternite not as above. 23

23. Antennae with apex of second segment and base of third conspicuously reddish; arista with sparse short hairs; hind tibia with a posterior bristle in line with upper posterodorsal one *emmesia* Malloch
- Antennae with entire second segment and a large portion of third reddish; arista densely pubescent; hind tibia without a posterior bristle *lipsia* Walker
- Antennae entirely black; arista almost bare; hind tibia without a posterior bristle *lativittata* Malloch
24. Mid femur with a strong bristle beyond middle on anteroventral surface; second antennal segment reddish at apex 25
- Mid femur with a strong bristle as above; second antennal segment entirely black *lativittata* Malloch
- Mid femur without an anteroventral bristle beyond middle; second antennal segment entirely reddish. 27
25. Fifth sternite and hypopygium ferruginous; thorax with one pair of moderately long presutural acrostichals; fore tibia with one anterodorsal and two posterior bristles *subgrisea* Malloch
- Fifth sternite and hypopygium black; thorax with two pairs of strong presutural acrostichals; fore tibia with one anterodorsal and one posterior bristle 26
26. Mid tibia with an anteroventral bristle; fore femora almost entirely black; fore coxæ black.
quadrispinosa Malloch
- Mid tibia without an anteroventral bristle; fore femora with a blackish stripe on upper surface; fore coxæ black in front *flavicans* Stein
27. Hind tibia with one anteroventral bristle
duplicata Malloch
- Hind tibia with two anteroventral bristles.
substriatella Malloch
28. Abdomen with an interrupted dorsocentral vitta, and a spot on each side of each tergite, giving the abdomen the appearance of having three series of black spots on dorsum *acutipennis* Malloch
- Abdomen with or without a blackish dorsocentral vitta, without the lateral spots 29
29. Mid tibia with a median anteroventral bristle; mid femur with one or more strong bristles beyond middle on anteroventral surface *apicalis* Stein
- Mid tibia and mid femur without bristles as above... 30
30. Tibiae largely or entirely reddish 31
- Legs entirely black 35

31. Parafacial in profile much wider than third antennal segment, at base of antennae; prealar bristle half as long as the bristle behind it; the extra posthumeral bristle very long 32
- Parafacial at base of antenna not as wide as third antennal segment; prealar bristle less than half as long as the one behind it 33
32. Processes of fifth sternite not flattened, glossy, bare at apices *jacobi* Malloch
- Processes of fifth sternite flattened, glossy, and armed with setulose hairs at apices; mid tibia with an anterior bristle *vanduzeei* Malloch
33. Hind femur with a series of short, stout, rather closely placed bristles on basal half of posteroventral surface; fifth sternite with dense, erect, stiff black hairs on inner half of each process *pedestris* Malloch
- Hind femur with a number of long, widely placed bristles on basal half of posteroventral surface; fifth sternite with dense, erect hairs near base of each process. . 34
34. Palpi and antennæ black; processes of fifth sternite bare at apices *fringilla* Malloch
- Palpi and second antennal segment rufous; processes of fifth sternite with a number of short stiff setulæ at apices *vanduzeei* Malloch
35. Hypopygium very large; third antennal segment not twice as long as second; hind tibia with three anterodorsal bristles *rubivora* Coquillett
- Hypopygium small or moderate in size; hind tibia with two anterodorsal bristles 36
36. Deep black species, with very faint grayish pruinescence on thorax, the abdomen densely drab-gray pruinescent; prealar one third as long as the bristle behind it *littoralis* sp. n.
- Black species, with dense whitish gray pruinescence on both thorax and abdomen; prealar bristle absent or minute *slossonæ* sp. n.

Pegomyia acutipennis Malloch.

Stein has erected a genus *Enneastigma* for the reception of a species which very closely resembles this one. The only character which he cites for the separation of the genus from its allies is the tripunctate abdomen. In view of the fact that there does not appear to be any real structural character for the separation of *acutipennis* from the other species in the group in the foregoing

key I have not removed it to Stein's genus, which may really be entitled to generic rank.

***Pegomyia littoralis* n. sp.**

Male—Entirely black, shining. Abdominal dorsocentral vitta linear. Wings slightly infuscated. Calyptrae white. Halteres yellow.

Frons as wide as distance across posterior ocelli; arista pubescent. Thorax with two or three pairs of presutural acrostichal bristles; prealar small. Abdomen tapered to apex, depressed; hypopygium small; fifth sternite with short processes which are rounded at apices, have a few long hairs at bases of processes and are almost bare beyond. Hind femora with irregular bristles on anteroventral surface and some bristles on basal half of posteroventral; hind tibia with one anteroventral, two anterodorsal, and two posterodorsal bristles. Wings slightly pointed, first posterior cell narrowed at apex. Length, 4.5–5 mm.

Type, Mt. Cadillac, Mt. Desert, Me., July 25, 1919. Paratypes, three males, Bar Harbor, Me., July 21–22, 1919 (C. W. Johnson).

A female which appears to belong to this species has the frons reddish anteriorly, one third of the head-width, and with a pair of cruciate interfrontal bristles.

Locality, Fogo Island, New Foundland, July 29.

***Pegomyia slossonæ* n. sp.**

Male—Similar in general color and habitus to *littoralis*, but with pale gray pruinescence, and a much broader dorsocentral abdominal vitta.

Frons barely wider than anterior ocellus, the orbits silvery. Prealar absent. Fifth sternite with the inner margins of the processes widely divergent apically, no long hairs at bases of the processes. Otherwise as *littoralis*. Length, 5 mm.

Type, Mt. Washington, N. H., 2,500 feet, June 14, 1916 (C. W. Johnson).

Named in honor of Mrs. A. T. Slosson who has done so much collecting in the region where the type was taken.